

COPYRIGHT GENERAL ELECTRIC CO. FORMAT: USA MATERIAL SAFETY DATA SHEET PRODUCT: GE32000 SPACE INVADER POLY INSUL FOAM -----1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION MANUFACTURED BY: SUPPLIED BY: GE SEALANTS & ADHESIVES GE SEALANTS & ADHESIVES 260 HUDSON RIVER ROAD 260 HUDSON RIVER ROAD WATERFORD, NY 12188 WATERFORD, NY 12188 EMERGENCY PHONE (24 HRS) EMERGENCY PHONE (24 HRS) 518-237-3330 518-237-3330 REVISED: 04/03/02 PREPARER: KE LINT KE LINTZ CHEMICAL FAMILY/USE: POLYURETHANE ADHESIVES FORMULA: MIXTURE COMPOSITION/INFORMATION ON INGREDIENTS ------PRODUCT COMPOSITION/ APPROX. ACGIH TLV OSHA PEL CAS REG NO. WGT. % TWA STEL TWA STEL UNITS 1. HAZARDOUS 4,4'-DIPHENYLMETHANE DIISOCYANATE 10-30 .051 C NE .2 C NE MG/M3 ISOCYANIC ACID, POLYMETHYLENEPOLY-PHENYLENE ESTER (MDI) 10-30 NF NE NF NE NA 9016-87-9 POLYMERIC COLORANT BLEND >1.00 NE NE NE NE VENDOR LIQUIFIED PETROLEUM GAS VENDOR 10-30 1000 NE 1000 NE PPM 2. NON-HAZARDOUS POLYOL MIXTURE 30-60 NE NE NE MIXTURE NE See Section 15 for description of any WHMIS Trade Secret(s).

\_\_\_\_\_

#### HAZARDS IDENTIFICATION

## EMERGENCY OVERVIEW:

Contents under pressure,

Irritating to skin, eyes, and respiratory tract.

Harmful if swallowed, inhaled, or absorbed through skin.

May cause central nervous system depression.

Viscous foam; solid upon curing.

Danger! Extremely Flammable

May cause allergic skin reaction.

Hydrocarbon odor

Blue solid

POTENTIAL HEALTH EFFECTS:

INGESTION:

DO NOT INGEST! Ingestion of uncured product can be harmful or fatal. Can cause severe irritation and corrosion of mouth, throat, and gastrointestinal tract. Symptoms include nausea, stomach pain, diarrhea, abdominal cramps and spasms, bloody watery stools, and vomiting of hard whitish fragments of polymerized isocyanate. Product may cure in gastrointestinal tract and obstruct the passage of food and air. Other effects include slowed or irregular heartbeat, metabolic acidosis, blood disturbances, central nervous system effects, coma, and death.

## SKIN CONTACT:

This product contains ingredients which may produce an allergic skin reaction. It should be treated as a skin sensitizer. Will bond skin surfaces together.

Contact may cause severe irritation with redness, pain, and rash.

# INHALATION:

Harmful if inhaled.

Inhalation of vapors or gas can cause respiratory tract irritation, breathlessness, wheezing, coughing, decreased pulmonary function, headache, nausea, vomiting, chest pain, and irregular heartbeat. Central nervous system depression can occur with disorientation, drunkeness, suffocation, convulsions, coma, and death. Respiratory and cardiac sensitizer. Overexposure may cause chemical pneumonitis, inflammation of the lungs, and pulmonary edema which may be fatal. Symptoms may be delayed for several hours. EYE CONTACT:

Will bond eyelids together.

Contact with product, vapors, or propellant gas can be irritating and damaging to the eye.

MEDICAL CONDITIONS AGGRAVATED:

Respiratory disorders.

Central nervous system disorders.

Applies in uncured state.

Cardiovascular disorders.

Skin disorders.

Allergies.

SUBCHRONIC (TARGET ORGAN) EFFECTS:

Central nervous system

Immune system

Skin

Respiratory tract

Eyes

CHRONIC EFFECTS/CARCINOGENICITY:

This product or one of its ingredients present 0.1% or more is NOT listed as a carcinogen or suspected carcinogen by NTP, IARC, or OSHA.

PRODUCTS/INGREDIENTS

This space reserved for special use.

PRINCIPLE ROUTES OF EXPOSURE:

Dermal - skin.

Inhalation.

OTHER:

None known.

-----

# 4. FIRST AID MEASURES

------

#### INGESTION:

GET MEDICAL ATTENTION OR CALL POISON CONTROL IMMEDIATELY! Inform medical personnel that victim has swallowed isocyanates. Do not induce vomiting. Do not give anything to drink. Keep victim warm and at rest until help arrives. If vomiting occurs, keep head lower than hips to prevent aspiration. If unconscious, turn head to side. If not breathing, begin artifical respiration using a barrier device. SKIN:

Product adheres to skin. Remove contaminated clothing. Wash immediately with abrasive soap. Acetone or alcohol may be helpful. If product cannot be removed, or allergic reaction with reddening and blistering develops, get immediate medical attention.

INHALATION:

Remove victim from source of exposure.

Get medical attention.

If not breathing, begin artificial respiration using a barrier device. Because of chemical properties, do not use mouth-to-mouth contact.

EYES:

Flush eyes with large amounts of water for at least 15 minutes. Get immediate medical attention.

NOTE TO PHYSICIAN:

Treatment is symptomatic and supportive.

\_\_\_\_\_

# 5. FIRE FIGHTING MEASURES

\_\_\_\_\_

15 FLASH POINT: -104 (C) -155.2 (F)

METHOD : ND

IGNITION TEMP : NA (C) NA (F)

FLAMMABLE LIMITS IN AIR - LOWER (%): NA

FLAMMABLE LIMITS IN AIR - UPPER (%): NA
SENSITIVITY TO MECHANICAL IMPACT (Y/N): NO
SENSITIVITY TO STATIC DISCHARGE:
Sensitivity to static discharge is expected.
EXTINGUISHING MEDIA:
Carbon dioxide
Dry chemical
Water
Foam
Halogenated agents
SPECIAL FIREFIGHTING PROCEDURES:
Extremely flammable.
Cool exposed containers with water spray after

Cool exposed containers with water spray after extingushing fire.

Polymerization may take place during a fire due to elevated temperature where closed containers could violently rupture. Toxic hydrogen cyanide can be liberated under burning conditions Containers can build up pressure if exposed to heat (fire). Treat as a pressurized container.

Firefighters must wear NIOSH/MSHA approved positive pressure self-contained breathing apparatus with full face mask and full protective clothing.

-----

-----

## 6. ACCIDENTAL RELEASE MEASURES

ACTION TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Wear appropriate protective equipment. Cover with absorbent material and place in open top container for later disposal. After curing, material can only be removed mechanically.

\_\_\_\_\_

\_\_\_\_\_\_\_

## 7. HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Avoid breathing vapors.

Avoid contact with skin and eyes.

Use only in a well ventilated area.

Curing releases vapors which may be harmful.

Remove contact lenses before using sealant. Do not handle lenses until all sealant has been cleaned from the fingertips, nails and cuticles. Residual sealant may remain on fingers for several days and transfer to lenses and cause severe eye irritation.

Good hygienic practices should be observed. Work clothes should be washed separately at the end of each work day. Disposable clothing should be discarded with material.

Keep away from children.

Store between 40 F and 120 F. Do not store where temperatures may exceed 120 F. If temperature is less than 40 F, contents

may separate. Shake can to mix.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS:

Eyewash stations.

See "Ventilation" below.

RESPIRATORY PROTECTION:

If exposure limits are exceeded or respiratory irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Supplied air respirators may be required for non-routine or emergency situations. Respiratory protection must be provided in accordance with OSHA regulations (see 29 CFR 1910.134).

PROTECTIVE GLOVES:

Impermeable or chemical resistant gloves.

EYE AND FACE PROTECTION:

Safety glasses with side shields.

OTHER PROTECTIVE EQUIPMENT:

Wear clean, body-covering clothing.

**VENTILATION:** 

Ventilation and other forms of engineering controls are preferred for controlling exposures. Respiratory protection may be needed for non-routine or emergency situations.

\_\_\_\_\_

# 9. PHYSICAL AND CHEMICAL PROPERTIES

\_\_\_\_\_

PRODUCT INFORMATION:

BOILING POINT : 93.333 (C) 200 (F)

VAPOR PRESSURE(20 C)(MM HG): 50 VAPOR DENSITY (AIR=1): NA

FREEZING POINT : NA (C) NA (F)
MELTING POINT : NA (C) NA (F)

PHYSICAL STATE : SOLID

ODOR : HYDROCARBON COLOR : BLUE-GREEN

ODOR THRESHOLD (PPM) NΑ % VOLATILE BY VOLUME NA 1 EVAP. RATE (BUTYL ACETATE=1): NA SPECIFIC GRAVITY (WATER=1) : 1.1 DENSITY (KG/M3) NA ACID/ALKALINITY (MEQ/G) NA NA PH VOC EXCL.H2O & EXEMPTS(G/L): ND SOLUBILITY IN WATER (20 C) : INSOL

SOLUBILITY IN ORGANIC SOLVENT (STATE SOLVENT): NF

13.

DISPOSAL CONSIDERATIONS

10. STABILITY AND REACTIVITY
STABILITY: STABLE HAZARDOUS POLYMERIZATION: WILL NOT OCCUR HAZARDOUS THERMAL DECOMPOSITION/COMBUSTION PRODUCTS: Carbon monoxide. Carbon dioxide. Oxides of nitrogen.
Hydrogen cyanide. INCOMPATIBILITY (MATERIALS TO AVOID): Do not expose to amines. Alcohols. Finely powdered metals. Bases.
CONDITIONS TO AVOID: Keep away from heat, sparks and flame. Avoid any source of ignition. Freezing conditions
11. TOXICOLOGICAL INFORMATION
PRODUCT INFORMATION: ACUTE ORAL LD50 (MG/KG): UNKNOWN ACUTE DERMAL LD50 (MG/KG): UNKNOWN ACUTE INHALATION LC50 (MG/L): UNKNOWN OTHER: None.
AMES TEST: UNKNOWN
12. ECOLOGICAL INFORMATION
ECOTOXICOLOGICAL INFORMATION: No data at this time  1 CHEMICAL FATE INFORMATION: No data at this time

D2B TOXIC MATERIALS

DISPOSAL METHOD: Disposal should be made in accordance with federal, state and local regulations. 14. TRANSPORT INFORMATION DOT SHIPPING NAME: CONST DOT HAZARD CLASS: ORM-D CONSUMER COMMODITY DOT LABEL(S): NONE UN/NA NUMBER: NA PLACARDS: NONE IATA: CONSUMER COMMODITY, 9, ID8000 IMO IMDG-code: PRODUCT NOT PROPERLY LABELED FOR OCEAN SHIPMENT EMS No: NA EUROPEAN CLASS: RID (OCTI): 2.2 ADR (ECE): 2.2 RAR (IATA): 2.2 15. REGULATORY INFORMATION SARA SECTION 302: None Found SARA (311,312) HAZARD CLASS: ACUTE HEALTH HAZARD CHRONIC HEALTH HAZARD FIRE HAZARD SARA (313) CHEMICALS: THIS PRODUCT CONTAINS TOXIC CHEMICAL(S) LISTED BELOW WHICH IS(ARE) SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 AND 40 CFR PART 372. \_\_\_\_\_\_ Diphenylmethane Diisocyanate 101-68-8 ISOCYANIC ACID, POLYMETHYLENE-POLYPHENYLENE ESTER 9016-87-9 CPSC CLASSIFICATION: NA WHMIS HAZARD CLASS: COMPRESSED GAS B2 FLAMMABLE LIQUIDS D2A VERY TOXIC MATERIALS

```
WHMIS TRADE SECRET:
None
EXPORT:
SCHDLE B/HTSUS:
                 3909.50 polyurethanes
HAZARD RATING SYSTEMS
        FLAMMABILITY 4 , REACTIVITY 1 , HEALTH
HMIS
        FLAMMABILITY 4 , REACTIVITY 1 , HEALTH 2
NFPA
CALIFORNIA PROPOSITION 65:
```

These data are offered in good faith as typical values and not as product specifications. No warranty, either expressed or implied, is made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable.

However, each user should review these recommendations in the specific context of the intended use and determine whether they

are appropriate.

16. OTHER INFORMATION

......

C = ceiling limit NEGL = negligible EST = estimated NF = none foundEST= estimated NF = none found
NA = not applicable UNKN = unknown
NE = none established REC = recommended
ND = none determined V = recomm. By vendor

By-product = reaction by- SKN = skin product, TSCA inventory TS = trade secret status not required under R = recommended

40 CFR part 720.30(h-2) MST = mist

STEL = short term exposure NT = not tested

limit

This product contains a chemical which is not listed on the Canadian Domestic Substances List (DSL). It is provided to you for Research and Development or Product Development purposes only. Any use of a chemical not listed on the DSL for a commercial purpose in quantities greater than 20 kilograms is contrary to Canadian Law. Under the provisions of the Environmental Protection Act, chemicals which are not listed on the DSL may be manufactured in or imported into Canada in quantities of 1,000 kilograms or less annually, or 5,000 kilograms cummulatively, for Research and Development or Product Development purposes.

All chemical substances in this material are included on or exempted from listing on the TSCA inventory.

DATE PRINTED: 04/04/02